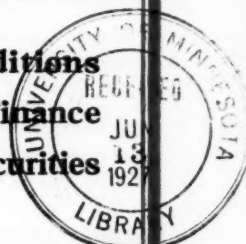


1812



1927

**Economic Conditions  
Governmental Finance  
United States Securities**



New York, June, 1927

**General Business Conditions**

**T**HE general business situation in May has continued satisfactory. Manufacturing is going on in large volume, distribution is apparently keeping pace, employment conditions are good, and money is abundant for business purposes.

There are, admittedly, unsatisfactory elements in the situation. The coal strike is now going into the third month without any prospect of settlement, and although there is no immediate danger of coal shortage owing to record stocks and heavy non-union production, it is none the less a disturbing factor in the background. The mounting destruction wrought by the Mississippi floods, the poor crop weather in the West, the general downward tendency in prices of non-agricultural commodities, the serious overproduction in oil, and evident over-capacity in numerous other lines, are among other factors against which business has had to contend.

Opposed to these, however, are strong supporting influences. The steel industry continues to operate at relatively high levels, reflecting activity in a wide variety of consuming lines. Building construction is going forward in large volume, the automobile industry is operating at high though not record-breaking levels, and there are good or improving reports from other important lines such as tires, electrical supplies, textiles, hides and leather, and railroad equipment. Foreign trade continues in healthy condition, and domestic retail trade is doing well, considering the very unfavorable weather conditions in many sections. Little distress merchandise is being offered on the wholesale markets at the present time, according to T. F. Merseles, head of the mail order house of Montgomery Ward & Co., who is in a position to speak authoritatively, as concerns like his usually get offers of such stock when it is being pressed for sale.

That business in the aggregate is averaging fully up to or above normal appears in such measures of volume as electric power consumption, railway traffic, and payments

through banks. Industrial consumption of electrical energy in April, according to the *Electrical World*, was  $2\frac{1}{2}$  per cent larger than in April last year. Railway traffic, despite some reduction in the movement of coal caused by the strike, continues larger than ever before at this season, while bank checks cashed, which cover all varieties of business transactions, are running some 3 to 4 per cent ahead of last year, notwithstanding the generally lower level of prices.

The stock market, fostered by easy money, continues to display a bullish enthusiasm in certain groups which would seem to amply discount such continued good business as can be seen in the near future.

Quite clearly, although maladjustments exist, they have not been basic enough to seriously disturb the general condition of stability which has characterized the past few years. Business is displaying greater unevenness than heretofore, but we believe this to be due, not to any fundamental weakness, but rather to the increasing intensity of competition, which is differentiating more closely between individual industries upon their equipment and ability to win the favor and patronage of the public. With the important factor of credit continuing favorable, the railroads operating at highest efficiency, and our people enjoying the highest per capita income ever received by the people of any country, business rests on strong foundations which we believe will sustain the general average at good levels during the coming months.

**The Continued Activity of Building**

A major influence in support of business has been the continued activity of building. This industry had been marked in the minds of many for a rather decided downturn this year, and the persistence with which it is holding up is causing some revision of opinion among those who have been expecting a slump in building to bring about a general recession of business activity. April figures on value of contracts awarded throughout the country were only 3 per cent below the record sum reached

in March and 6 per cent higher than that of April a year ago. This showing brings the record of the year to date practically equal to that of the corresponding period of last year.

Following are the figures of the F. W. Dodge Corporation comparing the contract awards for April, 1927, and 1926, by different sections of the country:

	April, 1926	April, 1927	% Change
New England States—	\$ 44,266,000	\$ 42,537,000	— 3.9
N. Y. State & No. N. J.	170,992,700	163,570,500	— 4.3
Middle Atlantic States—	56,713,600	73,244,400	+29.1
Pittsburgh District —	61,853,600	84,476,300	+36.5
Central West —	126,448,000	165,790,900	+31.1
Northwest —	11,385,700	9,268,900	—18.5
Southeastern States —	80,593,500	44,877,800	—44.3
Texas —	18,360,500	20,624,900	+12.3
Total (37 States)—	\$570,613,600	\$604,390,700	+ 5.9

How this continued heavy building is being divided by types of construction is indicated by the next table comparing the classified figures of contracts awarded for the first four months of 1927 and 1926. It will be observed that residential building, though still outranking all other types, is down a little compared with a year ago, while commercial building and construction of public works and utilities, next in line in point of aggregate value, show substantial increases.

	Jan. 1 to May 1 1926	1927	% Change
Commercial Buildings —	\$319,643,800	\$342,531,400	+ 7.1
Educational Buildings —	101,627,600	111,257,800	+ 9.4
Hospitals and Institutions—	38,156,000	36,310,900	— 4.8
Industrial Buildings —	229,428,500	161,800,800	—29.4
Military and Naval Buildings	4,948,000	1,229,300	—75.1
Public Buildings —	15,373,200	23,896,600	+55.4
Public Works and Public Utilities —	299,463,700	334,226,300	+11.6
Religious and Memorial Buildings —	37,968,200	51,962,600	+36.8
Residential Buildings —	897,569,300	848,449,400	— 5.4
Social and Recreational Buildings —	71,373,000	91,501,700	+28.2
Total —	\$2,015,551,300	\$2,003,166,800	— .6

There is no doubt but that conservative business interests view continued peak building operations with considerable misgiving, knowing from past experience the tendency for movements of this kind to go too far. Stimulated by the ease with which construction can be financed, builders are constantly going ahead with new plans and finding encouragement in the facility with which finished projects are taken up. There seems to be no difficulty in filling the new buildings, with their up-to-date facilities, but it is becoming increasingly apparent that this is being done in many cases at the expense of the older ones. A certain amount of this, of course, is normal and in line with progress and the rising standard of living, but carried to extremes it is bound to have a disturbing effect on real estate values. Whatever the ultimate outcome, however, of continued active building, its immediate influence upon business is bullish by reason of the large employment it gives to labor and the heavy consumption of building materials.

## Automobiles

The automobile industry thus far this year likewise has come nearer to vindicating the claims of the optimists than had been generally expected. Production of passenger cars for the first four months of the year showed a decrease of 15 per cent from the total in the corresponding period of last year, which is about in line with expectations, but if comparison is made on the basis of total value of products sold the figures for the two years would probably be much closer together. Competition has grown keener, but the net result, taking the industry as a whole, has not been unfavorable. The General Motors Corporation, and a number of the smaller companies as well, have done a record volume of business. Truck business has been better than the passenger car end, the output thus far this year being slightly ahead of the 1926 figures.

A feature of the automobile business in recent months has been the increase of exports, the figures for March, the latest month for which data are available, being the largest on record. Passenger car exports of 29,985 set a new high mark, as did combined exports of passenger cars and trucks of 37,631. For the first quarter of the year combined exports of 98,932 cars and trucks showed a substantial gain over shipments of 82,496 in the corresponding period of last year, despite the lower aggregate of production this year.

Following is a table showing the trend of motor car and truck production and exports over the past ten years:

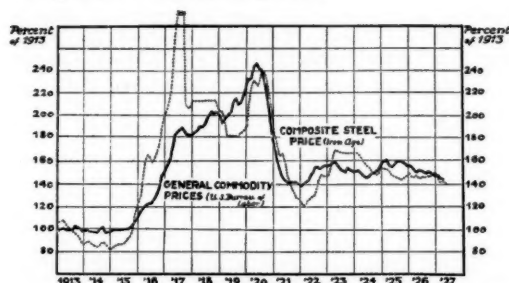
Passenger Cars			Trucks		
Production	Ex-ports	% Ex-ported	Pro-duction	Ex-ports	% Ex-ported
1918.. 943,436	36,936	3.9	227,250	10,308	4.5
1919..1,657,652	67,145	4.0	275,943	15,585	5.6
1920..1,905,560	142,508	7.4	321,789	29,136	9.0
1921..1,452,902	30,950	2.1	140,934	7,480	5.3
1922..2,302,923	66,791	2.9	241,253	11,443	4.7
1923..3,589,936	127,035	3.5	354,319	24,859	7.0
1924..3,144,999	151,380	4.8	350,346	27,352	7.8
1925..3,696,490	244,306	6.6	452,866	58,625	12.9
1926..3,765,059	238,481	6.3	454,383	66,775	14.6
1st quarter					
1926.. 973,801	65,804	6.7	103,970	16,692	16.0
1927.. 799,270	73,462	9.1	120,417	25,470	21.1

There is no doubt that exports are due to become an increasingly important factor in the automobile industry. As indicated by the table the ratio of exports to total production has increased considerably in the past ten years, the separate ratios for passenger cars and trucks in the first quarter of this year being 9.1 per cent and 21.1 per cent respectively, as against 3.9 per cent and 4.5 per cent respectively for the full year 1918. Future growth will be determined by the rapidity in the development of good roads abroad and the degree of general prosperity enjoyed by our foreign customers. With over 80 per cent of the total number of automobiles in use throughout

the world in the United States, the ultimate opportunities for the exploitation of foreign fields are practically unlimited.

#### Steel Industry Active

Operations in the steel industry in May are down to 80 per cent of capacity as compared with 94 at the high point in March, but the reduction is regarded as seasonal in part and a continued good volume of business is expected. With two such large consumers of steel as building and the automobile industry operating actively, demand from the railroads picking up, and substantial buying from a wide variety of less important sources, it is not likely that the steel business will undergo much of a recession. Prices, of course, have been a sore point in the industry, being now the lowest since 1916, with exception of the depression year of 1922. It is to be noted, however, from the following diagram that they are not materially lower as compared with pre-war than the general level of wholesale prices as shown by the Department of Labor's index. In the diagram the dotted line represents steel prices and the continuous line general wholesale prices.



In consequence of the millions of dollars poured back in recent years into new equipment with a view to reducing costs, the leading companies continue to make money, though profits in some cases have not been up to 1926 levels.

#### Improvement in the Textiles

The textile industry is another line from which good reports continue to come. Evidence of overtime operations appears in April figures on consumption of raw cotton which amounted to 619,140 bales, with spindle activity at the rate of 105.8 per cent of single shift capacity. Most of the mills in the South are operating full or running overtime, and while there is still much idle machinery in New England, many of the mills in that section are doing the best business in recent years. The Amoskeag Manufacturing Company, one of the largest of the cotton manufacturing concerns, is reported to be now employing 10,000 workers, the heaviest schedule in force for years.

The danger, in the opinion of the leaders in the industry, is that manufacturers will repeat their errors of past years in over-stocking the market. There has been a tendency for individual units of the industry to expand operations unduly in hopes of getting down costs with the result that goods accumulated in excess of demand. Thus far, however, the statistical position continues strong, if figures published by the Association of Cotton Textile Merchants of New York are to be taken as an index. These showed that while production in April increased 12 per cent over that of April last year, sales increased 49 per cent, unfilled orders at the end of the month increased 100 per cent, and stocks decreased 35 per cent.

The silk industry this year is not handicapped by the serious overproduction of fancy prints that occurred in 1926 and caused price cutting and inventory losses. The silk hosiery branch of the industry continues to enjoy unusual prosperity.

Deliveries of raw silk to American mills totaled 47,853 bales in April, or close to the record total of 49,242 bales set in March, and more than 10,000 bales above the total of April last year. Imports of raw silk during the month totaled 46,486 bales, a big increase over both 1925 and 1926 figures, notwithstanding which stocks in storage here May 1 declined as compared with the first of April and were the lowest since last September.

Reports from the rayon branch of the textile industry have been equally bullish. After a condition of overproduction last year the rayon situation is now one of inability on the part of manufacturers to keep up with the demand. Active demand in Europe is limiting imports and domestic concerns are under constant difficulties to supply their customers. Undoubtedly the chief factor in the about-face of the market this year has been the expansion of demand from cotton mills. This is interesting in view of the concern that has been felt by some that rayon would prove to be a serious competitor of cotton goods. As a matter of fact, cotton goods mills are rapidly becoming one of the best customers of rayon. The following table from the Journal of Commerce comparing deliveries of rayon yarn by the Viscose Company, one of the largest rayon producers, to the different trades during the first quarter of this year, suggests the extent to which the cotton goods industry has surpassed other lines in this respect:

Delivered to:	Per cent.
Cotton goods mills .....	25
Knit goods made on large machines, including underwear .....	25
Hosiery plants .....	21
Silk goods mills .....	10
Balance braids, trimmings, upholstery, plush, woolsens, etc. ....	19

The woolen situation, on the other hand, continues depressed, and the outlook is uncertain. Last year it was hoped that the bottom had been reached, but the past year was described by Thomas H. Ball, retiring President of National Association of Worsted and Woolen Spinners, at the annual meeting in May as the most disastrous that the trade has ever experienced. Despatches from Lawrence, Mass., indicate that the big mills located in and around that center are operating only 60 per cent of capacity. Obviously the fundamental difficulty is a capacity for production far in excess of the market demand.

Oddly enough, in the case of the woolen industry, the companies which have been most successful in holding their business have been the smaller concerns, as distinguished from the larger units, a tendency which seems to be precisely the opposite of that noted in business generally where big units have appeared to have a competitive advantage. Apparently the style factor in woollens favors companies small enough to adjust themselves promptly to quick turns in the market as fancies of the buyers change. The general statement that has been made to the effect that present conditions favor the concentration of industry in larger units should be understood as applying particularly to staple lines. In other lines the small business unit often has important advantages.

### **Money and Banking**

The money market on the surface has shown little change during May. The tone has been somewhat firmer than usual at this season, as indicated in the failure of call money rates to go below the 4 to 4½ per cent levels of March and April, but aside from this there has been little in the movement of rates to comment upon. Commercial paper continues to be quoted at 4 to 4¼ per cent for prime names, where it has been since early March, bankers' bill rates have remained unchanged with 90 day maturities at 3¾ per cent bid and 3½ per cent asked, while stock market time money has continued, as in the latter part of April, at 4¾ to 4½ per cent, depending on maturities.

#### **Important Movements Under the Surface**

Beneath the surface, however, important movements have been going on, international as well as national in character. There has been a further influx of gold to this country amounting to \$30,000,000, and bank loans and investments have risen to new record levels. Sterling exchange has fluctuated sharply in response to large international transactions, which have been reflected also by a substantial loss of gold from the Bank of England and a firmer trend of rates in the London mar-

ket. Connected with these movements have been large dealings in gold by the Federal reserve banks, including a purchase of close upon \$60,000,000 gold from an unnamed foreign correspondent, understood to be the Bank of France, and held abroad under earmark, and the sale of a large amount of gold estimated by the press in excess of \$40,000,000 to the Bank of France, this gold being earmarked in New York for the latter's account.

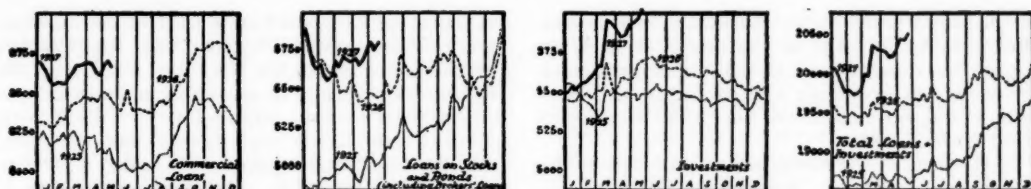
#### **Expansion of Bank Credit**

It is doubtful whether there is general realization of the extent to which the gold imports of this year have been making themselves felt in our banking situation. The series of four diagrams at the top of the opposite page, giving figures for the weekly reporting member banks, attempt to depict graphically the changes that have been taking place. As indicated by the chart on the extreme right, total loans and investments of these banks (representing about half the total commercial banking resources of the country) have increased some three-quarters of a billion dollars within the space of three months since February.

Breaking down these figures into their component parts reveals that commercial loans, as shown by the chart on the extreme left, have increased \$109,000,000 since the February low point and are now \$216,000,000 above the corresponding levels of a year ago. While this is a substantial increase, particularly in view of the lower level of prices, it is evidently only a small part in the total expansion that has taken place.

A larger proportion of the additional funds has been absorbed in loans secured by stocks and bonds, which are up \$228,000,000 from the February low point and \$349,000,000 above a year ago. The greatest increase, however, has been in bank investments, these at the last reporting date standing \$429,000,000 above the levels of February and \$333,000,000 above those of the corresponding period of last year. Clearly the gold imports have been supplying us with funds faster not only than they could be employed in the ordinary business channels, but faster even than the stock market has been ready to take them at current rates, so that banks have been obliged to go out and buy securities on their own account to keep their funds employed.

To put the situation still more strikingly, whereas commercial loans since February show an increase of \$109,000,000, loans secured by stocks and bonds plus securities held outright by banks showed a combined increase during the same period of \$657,000,000. Here indeed is an important cause of the continued strength in the stock market despite the existence of many factors which ordinarily might be considered to have bearish implications.



Loans and Investments of Weekly Reporting Banks. (000,000 omitted)

### Influence of Gold Imports

We have directed attention repeatedly to the undesirable effects of continuing additions to the country's stock of gold. It cannot be contended that such an expansion of bank credit as has occurred since February is normal or helpful. It does not represent a corresponding growth of business in the country, but clearly is an expansion of credit based upon the increasing gold reserves. We have pointed out heretofore that the effects of this increase in the volume of credit since 1920 have been largely ignored because they have not appeared in commodity prices and because the recovery of stock and bond prices has seemed to be a normal result of post-war conditions. Undoubtedly a rise of stocks and bonds was a legitimate accompaniment of the change in conditions from wartime, when the Government was monopolizing the security market and capital was almost unobtainable for private enterprise, and the present, when the Government has largely reduced and is still reducing its outstanding obligations and the country is making new capital faster than ever before. Nevertheless, conservative observers do not overlook the fact that wealth accumulation has not been the only factor in the market situation but that credit expansion resulting from gold imports, has been a powerful influence. It is important to distinguish between the two influences.

Less has been said about gold imports as an influence for inflation than would have been said if they had been expected to continue on an important scale, but the general belief has been that with the industrial recovery of Europe and the restoration of monetary systems to a gold basis, gold would cease to come to the United States, and might flow in the other direction. And in this connection it should be understood that the recent imports from Europe have not been due to ordinary commercial causes, but have been special transactions, probably related to currency stabilization and not likely to continue.

### Attitude of the Reserve Banks

It is important to note that the Reserve banks have not contributed to this expansion of credit. The amount of their credit outstanding has varied but little this year and was \$988,000,000 by their last statement against

\$1,028,000,000 by their first statement in February last, and \$1,119,000,000 on May 26, 1926.

Moreover, the Reserve banks have been engaged in two important gold transactions which although without authoritative explanation apparently were entered upon with a view to interrupting or checking the gold movement. Excepting receipts from Canada, which were seasonal and part of an ebb and flow movement which takes place every year, our gold imports since January 1st have been mainly from France or on French account. Approximately \$21,000,000 was received from that source in the first quarter. In April came the sensational development by which the Bank of France paid off a loan of £33,000,000 at the Bank of England, thereby releasing £18,350,000, or approximately \$90,000,000 of gold which the latter held as security.

At first, the public assumed that the Bank of France would transfer this gold to its own vaults in Paris, but scarcely was the transaction completed, when gold began to move from London to New York in \$6,000,000 lots, said upon good authority to be from the Bank of England for account of the Bank of France. Five shipments were received in New York in May, aggregating \$30,000,000. Rumor said that the entire \$90,000,000 was coming.

Then came an announcement that the Federal Reserve Banks had bought the remainder of the \$90,000,000 from the owner and would retain it in London, earmarked as a special deposit not included in the reserves of the Bank of England or of the Reserve banks.

The simultaneous drop shown in Government security holdings of the Reserve banks suggests the manner of payment. The Reserve banks apparently turned over to the foreign owners of the gold \$60,000,000 of Government securities, which the latter hold in this country and can convert into cash in this market at any time they desire to do so. So far as the general credit situation is concerned the transaction has the same effect as though the Reserve bank had permitted the gold to be imported and had then nullified its effects by the sale in this market of an equivalent amount of securities from its portfolio. The procedure, however, is more efficient in that it avoids the expense of shipment to this country and of a reverse shipment if gold exports to Europe

are required later. This, naturally, will be the first gold to be sold in the event of such an export movement and it will be moved at a lower rate of exchange and probably with less influence upon conditions here than if shipped from New York.

In the case of the more recent transaction the Bank of France, apparently desirous of increasing its gold holdings in this market, has purchased the gold from the Reserve banks and had it earmarked for its account in the Reserve bank vaults. Inasmuch as payment by the Bank of France necessarily involved a transfer of funds from the market to the Reserve banks, some action was necessary in order to avoid a temporary stringency. The Reserve banks, accordingly increased their holdings of Government securities by \$53,000,000, thus offsetting the market's loss, and bringing the Government security holdings of the Reserve banks back to the levels prevailing at the end of April.

### **The Bond Market**

The general buying movement which has characterized the bond market so far this year continues in most groups and is maintaining bond prices at high levels despite some slowing up in the past ten days in the distribution of new issues. Fundamental conditions governing the market seem little changed: a fair volume of commercial funds continues to flow into the bond market for temporary employment; business and production are active and contributing substantially to the creation of new wealth.

Although new issues offered during the first five months of this year are well in excess of \$3,000,000,000, as compared with about \$2,300,000,000 for the same period of 1926, this tremendous volume in most instances has found a market. This is due not alone to the sustained demands of new capital seeking investment but also to the fact that a larger percentage of financing than ever before is for refunding purposes not demanding new capital. It is only natural that corporations having high rate bond issues outstanding should refund during this period when interest rates are down to a level where real savings are possible, providing, of course, the call features of the loans permit a refunding without substantial penalties.

The Dow Jones average for 40 listed domestic corporate issues (10 high grade rails, 10 second grade rails, 10 industrials and 10 public utilities) on May 25th was 97.42 as compared with a high for the year of 97.78 and with 95.36 on May 25th a year ago. Although bond prices are hovering around the highest level in fifteen years, returns are still well above what they were during certain periods in the past. In 1901, for instance, fifteen rep-

resentative railroad bonds sold at an average price fifteen points higher than the average of the same issues on May 1st, 1927, and the railroads were not in as strong a financial position then as they are today. In 1901 New York State 3 per cent bonds sold to yield 2.85 per cent as compared with today's yield of around 3.55 per cent. Massachusetts State 3s sold to yield 2.83 per cent, City of Boston 3½s to yield 3.03 per cent and Detroit School 3½s to yield 3.03 per cent. American Telephone and Telegraph bonds were offered to yield 3.75 per cent, a price in line with the best municipals of today. Compared with 1921 present bond prices appear high, yet they have a long way to go before attaining the peak reached in 1901. During the reconstruction period immediately following the war, the insistent world wide demand for funds forced interest rates to inordinately high levels. This was, of course, an abnormal situation not likely to be duplicated and for which allowance should be made in any long time comparison of present interest yields with yields of the past.

### **United States Treasury Operations**

On May 15th the Secretary of the Treasury issued a call for payment on November 15th, 1927, of all outstanding Second Liberty Loan 4 per cent Bonds and Second Liberty Loan Converted 4¼ per cent Bonds. The Second Liberty Loan was offered for subscription on October 1st, 1917, and a total of \$3,807,000,000 was allotted to over nine million subscribers. Of the original issue about \$750,000,000 has been redeemed by the Treasury on various accounts and about \$1,300,000,000 was refunded recently into the new Treasury 3½s. The \$1,700,000,000 still outstanding represents the balance now called for redemption. Because this particular issue is so widely distributed the Treasury Department is making every effort to acquaint all holders with the call for redemption six months hence. "The importance of this," Secretary Mellon says, "is emphasized by the Treasury records of previous calls for redemption or exchange. These records show that there are still outstanding at the present time in the hands of the public about \$30,000,000 in Government securities, on which interest has ceased. It is for this reason that the Treasury Department is making a special effort to see that the present announcement reaches as many Second Liberty Loan bond holders as possible."

On May 30th the Secretary of the Treasury offered in exchange at par for Second Liberty Loan bonds a new issue of Treasury bonds bearing 3¾ per cent interest, maturing in 1947 and callable in 1943. Cash subscriptions up to \$200,000,000 will also be accepted by the Treasury Department but purchasers will have

to pay 100½ for the new securities. These refinancing operations together with the March offering of 3½s will effect a total interest saving to the Treasury annually of around \$25,000,000. The decision of the Secretary to make an offering at this time at less than 3½ per cent indicates his confidence in the continuance of easy money conditions. It is probable that practically all the outstanding Second Liberty bonds will be offered in exchange for the new issue, as the gradually shrinking total of outstanding long term Government securities is an incentive to investors and a strong market support.

#### **Municipals**

In the Municipal bond market the chief event of the month was the sale of \$60,000,000 Corporate Stock and Serial Bonds by the City of New York. The bonds were offered to investors by the successful banking group at prices to yield from 3.50 per cent to 3.90 per cent.

#### **Railroad Issues**

There was pronounced strength in railroad obligations generally and legal issues reached the highest point in fifteen years. Not in many years has there been such a dearth of railroad bonds showing high yields. This situation is, of course, a direct reflection of the improved condition of railway finances and of general market conditions which have forced up the average price of all groups. With most second grade rails achieving a firmer position through growth in traffic and improving earnings it is only natural that these securities should come in for increasing attention. Another factor of course is progress towards railway consolidation. Lacking complete details, it is quite impossible to predict the effect of consolidation upon specific issues but there is little question that as unification progresses the obligations of many weaker systems will be measurably strengthened.

The leading railroad issue during the month was the \$50,000,000 Mortgage 5s of the Erie Railroad Company publicly offered at 94½ to yield 5.30 per cent. Proceeds are being applied in part to retirement of about \$35,000,000 of short term obligations including collateral 6s held by the United States Government, and \$10,000,000 two-year secured 4½s called for payment on July 1st. Balance of the proceeds will be used for betterments to property, increase in working capital and other purposes. Another important offering was that of the Chesapeake Corporation—\$48,000,000 20-year Convertible Collateral Trust 5s. The bonds were issued to provide funds for the acquisition of 600,000 shares of common stock of the Chesapeake & Ohio Railway Company, one share of such stock being pledged for each \$80 principal amount of bonds. A sinking fund

is provided which is expected to reduce substantially the amount of bonds outstanding prior to maturity.

#### **Utility Bonds for Savings Banks**

In line with the current tendency towards widening the field for savings bank investment recent action of the legislatures of Michigan and Minnesota legalizing certain public utility bonds is a natural development. The extensive growth in the assets of such institutions and the resulting widened investment demand have caused an increase in competition for the limited amount of bonds now rated as "legal" with the result that such securities have been given an artificial value which has lowered the earning power of savings bank assets. It is desirable of course that great rigidity be maintained in respect to laws governing investing power of savings banks so that the funds of depositors may be adequately safeguarded. The public utility industry however has achieved a degree of stability in America which entitles its better obligations to a savings bank rating. The action of Michigan and Minnesota in legalizing certain bonds in this class is just another step in the recognition of fundamental soundness of the public utility industry.

#### **The Situation in Agriculture**

March conditions were promising for an early Spring, but in the Middle West and Northwest rains and cold weather have held back farm work until the season is now ten days or two weeks behind the usual schedule, and real concern is felt for the corn crop. The acreage in oats has been reduced, which might have caused an increased acreage in corn if there was time to plant it. The situation as to corn is so much like that at the end of May, 1924, as to be disturbing. There was little good corn weather in 1924, with the result that the crop fell to less than 2,400,000,000 bushels, much of which was of poor quality, and the corn-hog ratio has been abnormal ever since. Some of the crop experts are saying that the rains upon the uplands of the states above Cairo, Ill., have done more harm to crops than the floods below Cairo. The influence of these conditions is seen in an advance of about 20 cents per bushel for corn in Chicago from the low point at the middle of April. Oats have had an advance of about 8 cents. Corn is about 20 cents and oats 10 cents above the level of a year ago, which would be very pleasing if accompanied by good crop prospects.

Reports from the winter wheat crop of the plains region have been conflicting. In eastern Colorado and parts of western Kansas and Oklahoma early drought caused abandonment of much acreage. The Government report

placed Kansas abandonment at 13 per cent, but even so, forecasts the State's crop at 143,000,000 bushels. More recently, damage from drought, rust and insect pests has been reported throughout the Southwest, and the estimates for Kansas, Oklahoma and Texas are all being revised downward to some extent. From Nebraska, Missouri and states east of the Mississippi reports are favorable. The Government estimates 38,900,000 acres remaining for harvest, which with conditions as of May 1st indicated a crop about 30,000,000 bushels under last year's. A larger decline is now expected.

The Spring wheat region of the Northwest has much better soil conditions than last year and a better crop of the small grains is looked for. Except that seeding has been delayed in some localities the wet weather has not been unfavorable to wheat, although bad for corn. A considerable increase in wheat acreage was expected in the Canadian Northwest this year, the ground having been prepared last fall, but seeding is so far behind normal that a reduced acreage is now expected.

Exports of wheat from North America have been large in recent weeks, and consumption by the importing countries apparently has been absorbing the receipts without accumulations at the ports. From August 1, 1926, to the middle of May the disappearance of wheat from central world markets had aggregated 636,000,000 bushels, against 517,000,000 in the corresponding period of the previous year. This movement corresponds with the fact that European grain crops were not as large last year as in 1925. The outlook now is for only a moderate carry-over, and wheat has risen to the highest figure made on the 1926 crop.

While the price of corn, influenced by prospective crop conditions, has been advancing, hogs have undergone a sharp decline, influenced by an accumulation of pork products in store. Packers have been complaining that their costs were too high, and have effected a reduction in hog prices of about \$3 per hundredweight from the high of last Fall. Cattle have been in reduced supply and the market has afforded support for the belief that the cattle industry is on a surer basis than for some time. Heavyweights, finished young cattle and feeders all are bringing better prices than a year ago. A rise in the price of hides is helping the price of cattle.

The dairy industry came out of the Winter season with storage stocks entirely cleared out, and but for importations a real scarcity of butter would have existed before the Spring increase of production began. The dairy industry has been on a satisfactory basis throughout all of the period of agricultural depression, despite numerous predictions that it would be speedily overdone. The number

of dairy cows in the country has diminished since 1920, but the production of milk has notably increased, as the result of effective educational work in all the dairy states to get rid of unprofitable producers. The consumption of milk and cream is steadily increasing.

The poultry and egg industry on the other hand is experiencing over-production. All sections of the country apparently have adopted the policy of diversifying farm production by going into poultry. Receipts of eggs at four leading central markets in April were 30 per cent larger than in that month of 1926, and prices have been 5 to 7 cents lower. Holdings of frozen poultry are very heavy.

#### The Cotton Situation

The Secretary of Agriculture has expressed the opinion that excepting cotton the country's supply of farm products will not be materially affected by the Mississippi flood. When the reserves of cotton existing in the carry-over August 1st last are taken into account there is little likelihood of an early shortage in the cotton supply. The fluctuations from one year to another in the cotton crop are frequently greater than any estimate of the curtailment likely to result from the flood. The final estimate of the Department of Agriculture upon the 1926 crop is 17,911,000 bales or 1,807,000 more than the 1925 crop, which was the largest previously produced. The carry-over of all American cotton was about 5,500,000 bales, or fully one-third of a normal crop. The curtailment chargeable to the flood seems likely to be less than 500,000 bales. It appears, therefore, that the size of this year's crop and the ultimate price movement are much more dependent upon the yield in other cotton-producing territory than upon the final reckoning of losses by the flood.

Last year's big crop has seemed to be in the way of a much more successful distribution than appeared probable last December. Spinners' takings at home and abroad have been over 2,000,000 bales larger than in the corresponding time of last season, and exports nearly 3,000,000 bales greater. These figures do not signify consumption to date, but they show the extent to which cotton has been taken off this market. Upon the strength of this buying the market had made an advance of better than 2 cents per pound before the flood influence became a factor.

This is a good showing of spontaneous market strength, but credit should be given for the good work that was done to organize support and stem the decline when a general state of demoralization seemed imminent. The surprising size of the crop unsettled the trade's ideas of values. Time is required under such conditions to arrive at a consensus of opinion, and leadership is serviceable in shaping opin-

ion. The action of President Coolidge in appointing a committee to deal with the situation, the activities of the committee in organizing finance companies in the cotton states to carry cotton through the agency of the intermediate credit banks, and the large amount of carrying power quickly brought into sight, undoubtedly exerted a very helpful influence at a critical time. The finance companies never were required to function extensively, but their formation and the program which they proposed inspired confidence. They offered definite support, the decline was checked, and trading thereafter moved along an orderly course with a gradual development of strength.

The cotton goods industry has had a great stimulus in all countries from the decline in price of the raw material, and the fact that the new crop deliveries are now selling above 16 cents despite the abundant supplies, gives promise that with normal yields and improving industrial conditions over the world, cotton will bring fair returns to reasonably efficient producers.

#### The Horse-Tractor Argument

In republishing in our April number a statement by Dean Curtiss of the Iowa State College of Agriculture, relative to the effect of the displacement of horses on farms by motor power, we had no intention of entering the horse-tractor controversy. We had expressed the opinion that the low prices ruling for the feed grains over the past two years were directly traceable to an unbalanced relationship between the supply of these grains and the demand for consumption on the farms.

The chief factor in the corn situation is consumption by hogs, and the number of hogs slaughtered under Federal inspection was 53,333,708 in 1923, 52,872,634 in 1924, 43,042,867 in 1925 and 40,636,208 in 1926. The effect upon the consumption of corn of this heavy reduction in the number of hogs prepared for market in 1925 and 1926 as compared with the two preceding years, could not fail to have an important influence upon the price. Furthermore, the trend of up-to-date farming practice is to the use of more legume pasturage and less corn in obtaining growth and weight for hogs.

While the number of cattle slaughtered under Government inspection has not been decreasing in recent years, the number in the country as shown by the census of 1925, was 61,571,000, against 66,652,000 shown by the census of 1920.

The statement of Dean Curtiss in regard to the diminished number of horses in the country placed the reduction at 5,000,000 head. The recently published figures of the 1925 census show 16,535,759 on farms and ranches in that year, against 19,767,161 in 1920. If the

numbers in towns and cities were included the total probably would not be far from that named.

On the whole it is evident that a very substantial reduction in the consumption of corn and other grains commonly fed to live stock has occurred in the last few years, and it is reasonable to suppose that this has had much to do with the surplus and low prices. This was the feature of the Curtiss statement which commanded our attention.

#### A Subject in Controversy

The question whether the horse or the tractor affords the most economical power for farm use is the subject of a lively controversy, which will have to be decided by the farmers themselves, with reference to their individual circumstances. Probably no general reply would be suited to all. Dean Curtiss is a friend and champion of the horse for general purpose farming, but even he might not go so far as to say that the tractor does not have a place in the farm economy. The testimony of satisfied users cannot be disregarded, and there is much of it. According to the 1925 farm census the number of farms upon which tractors were owned at the beginning of the year was 474,694, as against 229,332 in 1920. Sales in 1926 and the first four months of 1927 are reported as at an increasing rate. It is true that a large majority of the farms still use horse-power, but the tractor has made rapid progress, and been very much improved as a practical machine since first introduced.

Of course it is not a conclusive circumstance in favor of the horse or against the tractor that the one consumes farm products while the other does not. That is only one element in the case. There must be a comparison of the costs and net results of each kind of power. We have received numerous letters upon the subject, too long to give in full, but some of them are very specific as to the services of motor power. One of them refers to the combined harvester and thresher, which is affirmed to be "one of the greatest savers of time and money ever developed for the handling of a series of farm operations." Another mentions "the 10-foot tractor-binder, which has double the capacity of the largest horse-drawn binder." Others refer to the varied uses of the tractor with belt power and to the superior service of motor-driven machinery in enabling a farmer to expedite operations at critical crop periods. The present late planting season affords evidence in support of the latter claim.

The advocates of the tractor emphasize that its service is in increasing the capacity of man-power, and that as man-power increases in money-value agriculture is under the same necessity as the other industries to practice economy in its use. A revolution is being

wrought in the other industries in this manner, and no proprietor can survive in these industries who does not equip his workmen with the most effective implements of production.

#### More Agricultural College Testimony

A professor of agricultural economics in a middle-western college of agriculture writes us as follows, quoting in part:

The fact is that the farmers are not going back to horse power on the farms to any great extent. The age is too speedy. When in Marshall County, Iowa, a farmer can cultivate thirty acres of corn per day with a two-row tractor cultivator he is quite content to let his horses run in the pastures, and with further extension of this type of farming he will have neither the horses nor the pasture as a burden to the general overhead of his operations. Some balance must be worked out between horses and tractors. No one knows just what it will be. The Dean says the tractor leaves no fertilizer for farm use. Another view is that it leaves all of it. The corn, oats and hay can be used for other purposes. After all, isn't it rather absurd to say that we ought to have live stock, productive or non-productive, in order to eat up the surplus. That is like the plea of the militarists for a larger standing army of non-producers.

There is a point to the statement that we have a greater surplus in the form of grain than we would have had had the tractor not come into use. Farmers always have to adjust themselves to new conditions, but not so frequently nor so rapidly as do manufacturers.

Another letter has the following along the line of the above:

The declaration that the tractor and truck "displace an important outlet for farm grain," is unsound. What they really do is to divert grain from an unprofitable to a profitable outlet; it is less profitable to feed grain or roughage to horses than to any other farm animals.

As I see it, the Dean's recommendation is, in effect, that the goose which lays the golden egg shall be killed to save its feed for an unprofitable rooster.

Another very suggestive letter from a man who has been connected for many years with colleges of agriculture in the west, says, in part:

We are urging efficiency in our agriculture. The fact that we are testing our dairy cattle and doing away with the "boarders" undoubtedly results in a larger amount of milk for the same amount of corn or other farm crops fed. If all we wished to do was to get rid of the surplus, it might be logical to bring back the "boarder" cows regardless of whether or not it is the most efficient use to make of the feed or time. The same may be said for the tendencies toward better pigs, chickens and other live stock consumers of farm crops.

The farmer is in the business of manufacturing food, and like other American industrialists, he is finding that he can make profitable use of more power. The tractor has supplied this increase.

Economists in your organization have, undoubtedly, discovered that the amount of food consumed per capita in the United States is materially less than it was twenty or even ten years ago. This is mainly due to the fact that men are now largely directors, rather than the source, of industrial energy. There is even greater change in the character of the food we eat; due to diet education, we are consuming larger amounts of fruits, vegetables, and dairy products, and smaller amounts of meat, which, as you know, is one of the main outlets for corn.

I have been studying farm production and use of machinery in various parts of the Middle West and I am convinced that a fourth of the people now engaged on American farms could be removed without a noticeable decrease in total crop or livestock production.

#### The Influence of Machinery Upon Agriculture

All of this is pertinent to the entire subject of agricultural depression. Is it true that "a fourth of the people now engaged on American farms could be removed without a noticeable decrease in total crop or live-stock production?" If so, the explanation would seem to be that while improved farming methods and equipment have increased the capacity of the farms per acre and per worker, the farm population has not fully adjusted itself to the conditions. With increased machine capacity, it may be that the average farm of the future is to be larger than heretofore, that consolidations are in order in agriculture as elsewhere and that less man-power will be used.

Secretary Jardine has been quoted recently as saying that remarkable strides are being made in lowering production costs on the farms and that the results will be seen before long in farm profits. A lessening of costs implies greater production per worker, and there may be in this an explanation of the statement appearing in the May bulletin of the Bureau of Economics, Department of Agriculture, to the effect that the farm population of the United States decreased 649,000 persons last year. Using the 1925 agricultural census figure, 28,982,000 as the base, the bureau has calculated the farm population January 1, 1926, at 28,541,000 and on January 1, 1927, at 27,892,000.

Throughout our history the percentage of the population required to supply food for all has been constantly diminishing, by reason both of the growth of the other industries and the increasing use of machinery on the farms. There is nothing strange about it, but the movement always has been viewed with concern, as evidence of agricultural depression and perhaps national decay. If the movement involves hardships to individuals that fact is regrettable, but if, as may be supposed, those who are moving are improving their condition by doing so, a different view may be taken. It is better to comply with economic conditions and work with them than to disregard them or try to set up opposing policies.

The readjustments of population between agriculture and the other industries have been effected in the past largely through the distribution of immigrants, but immigrants have become an almost negligible quantity. Agriculture always has been recruiting ground for the other industries and occupations, and with immigration restricted as now the prospect is that the demand upon the farms for workers will be stronger in the future than in the past. In other words, it looks as though the changing demands of our industries must be met by shifting among our own workers, and if the shifting is done readily and under-

standingly, in response to the economic requirements, the entire industrial system will be aided in maintaining that state of equilibrium which is necessary to general prosperity.

### **The Mississippi Flood**

The Mississippi flood of 1927 has made a record surpassing all its predecessors in volume of water, area of territory inundated, damages to property and number of people driven from their homes. At this writing the waters are subsiding above Louisiana, but still spreading in the lower part of that state, west of the river. Secretary Hoover, who has been constantly in the flooded region, and unremitting in his efforts to care for the flood sufferers, has estimated the number of people directly involved in the disaster at over 700,000, of whom fully 600,000 have had to be provided with shelter and food by relief agencies. The immediate emergency has been very great and the homes from which these people have been driven present a scene of desolation. In terms of human distress the disaster is one of overwhelming magnitude, and not only calls for most generous aid at the moment, but for such comprehensive study and treatment of the Mississippi river problem as will avoid the continual repetition of present conditions.

The history of the river and the delta through which it flows readily accounts for the difficulties experienced in trying to manage the stream in periods of rampage. The river laid down the lands originally and was accustomed to wander over them at will in times of flood, making fresh deposits of silt, until the incoming population attempted to confine the flood waters within artificial banks. Obviously the problem is not a simple one, for water in such volume, with the surface above the adjacent country, and flowing with a swift current through a soil which the river itself has deposited, has various ways of working mischief; nevertheless, the engineers of the Mississippi River Commission, who as a body have had the river under observation and treatment for now nearly fifty years have been unwavering in the opinion that the river can be controlled by the levee system, and that it can be done without expenditures which might be considered extravagant in view of the importance of the results.

#### **The Work of Captain Eads**

Captain James B. Eads, the distinguished engineer whose name always will be associated with the river, was the leading exponent of the theory of control which the engineers of today support with practical unanimity. The theory is that the river must be closely confined both in high and low water and the current made to scour the channel and keep it large enough to carry the body of water seek-

ing an outlet. Dredging is used to direct and supplement the work of the current, but fundamentally the stream must be confined and not allowed to wander in such manner as to cause the current in the channel to slacken, with the result that silt is deposited upon the river bed.

This is the principle upon which the jetties at the mouth of the Mississippi river have been constructed. The original work in South Pass was done by Captain Eads and associates under a contract to open a channel of 26 feet depth and maintain it for twenty years. The project was adopted in the river and harbor act of 1875, and the twenty years of maintenance under the contract began on July 8, 1879. After the contract period the government accepted the work and assumed maintenance, paying the contractors \$8,000,000. The South Pass was not used for navigation prior to the construction of the jetties, having only 9 feet of water over the bar. The jetties consist of a substructure of brush mattresses surmounted by a superstructure of concrete, with auxiliary works composed of round piling filled with willows and stone. The effect of the work has been to narrow the channel and give 35 feet of water, the channel being practically self-maintaining. The army engineers have nearly completed a similar work on Southwest Pass.

#### **The Mississippi River Commission**

The Mississippi River Commission, functioning in the War Department, was created by act of Congress in 1879. It is composed of three officers of the Corps of Army Engineers, two civilian engineers, one member of the Coast and Geodetic survey and one distinguished private citizen, the first to be appointed under the latter designation being the Hon. Benjamin Harrison, afterward President of the United States. This commission since its establishment has been the agency through which the expenditures by the United States Government upon the river have been directed.

The first money appropriated by Congress for the river was expended under the provision that "no portion of the sum hereby appropriated shall be used in the repair or construction of levees for the purpose of preventing injury to lands by overflow or for any other purpose whatever, except as a means of deepening or improving the channel of the river."

This restriction was upon the theory that the improvement of navigable streams for the use of commerce was properly a charge on the national treasury, but that the cost of protecting lands from overflow should be borne by the states directly interested. This policy was maintained until 1917, when an act was passed to provide for the control of the floods of the Mississippi river and of the Sacramento river in California, and from this time on the restrictive clause referred to has been omitted

from the appropriation acts. By this time it was generally recognized that the confinement of the river to the channel by means of a levee system was as necessary to the maintenance of a channel for navigation as any of the work that the Government had been doing. Under the policy inaugurated in 1917 two-thirds of the cost of the levee construction is supplied by Federal appropriations and one-third must be supplied by the states in which the work is done. Bank protection from the current and dredging work are still paid from Federal funds.

The Mississippi River Commission is in charge of all the work. It took over the local levees, which had been gradually constructed, not always in the best locations or on the most approved plan, and its policy has been to improve and strengthen them as funds were available, spreading its expenditures over the entire length of river under its jurisdiction, in cooperation with the authorities of the several states. Appropriations have not been continuous, a period of years without a flood causing interest to flag. The Federal act of 1917 appropriated \$45,000,000 for the Mississippi, of which not more than \$10,000,000 could be expended in any one year. In 1923, following the flood of 1922, Congress authorized the expenditure of \$10,000,000 per year for six years. The total of Federal expenditures for the improvement of the river since the Mississippi River Commission was created has been about \$160,000,000. Less than 45 per cent of this has gone into levee construction. One of the results of the expenditure has been the creation of a reliable 9-foot channel from Cairo to the Gulf, whereas in 1879 not 5 feet could be relied upon throughout that distance.

#### Engineering Opinion

Engineering opinion stands firmly by the levee system. It is summarized in the following paragraph from an editorial in the latest number of the "Military Engineer," which comments upon proposals for reservoirs, diversion channels, etc., as follows, in part:

The answer is plain and obvious. The levees, where of standard Commission grade and thickness, have not failed. The shortcoming of the system as a whole is its lack of completion. The present levee system contained, on July 1, 1922, approximately 380,000,000 cubic yards of embankment. To complete the whole of it to standard dimensions will require an additional 117,000,000 cubic yards. The net amount gained in the fiscal year 1922 was over 15,000,000 cubic yards. The completion of the system is, therefore, easily in sight and, when completed, adequate protection will be afforded.

Major R. P. Howell, engineer in charge of the Third Mississippi River District, summarizes the case by saying that the task before the Mississippi River Commission "is not principally to build entirely new levees, but to enlarge existing ones, making them thicker

and higher to a point where the system will safely pass the largest flow." The experience had this year in blowing up the levee below New Orleans with dynamite to relieve the pressure upon the levee at New Orleans furnished a demonstration that the levees can be made to hold water.

The engineers give no weight to the idea that levees cannot be built to stand any possible flood pressure, or that the plane of the river is rising, thus creating the necessity for higher levees. They admit, however, that the Mississippi drainage basin is so great that it is a serious problem to determine the maximum volume of water which the lower river may be called upon to carry. The coincidence of floods in the important tributaries is the principal factor.

The figures given below show the highest stage of water in previous floods at several points on the Mississippi and the highest figures of the 1927 flood at the same points. The figures represent feet above low water.

	Previous High	1927
Cairo, Ill. ....	54.69—1913	56.4
Memphis .....	46.55—1913	46.0
Helena, Ark. ....	55.20—1913	56.7
Arkansas City .....	58.00—1922	60.5
Vicksburg .....	54.85—1922	58.7
Natchez .....	55.30—1922	58.5
New Orleans .....	21.27—1922	21.0

The fact that lower water is shown at Memphis and New Orleans in 1927 than in previous years is due to levee breaks which have relieved the pressure at those points. Doubtless the record for 1927 would have shown a higher stage at all of these points if the water had been completely confined.

#### The Question of Spillways

This uncertainty as to the coincidence of the flow in the tributaries is the basis of uneasiness about the future. The flood of 1922 was the greatest to that time, and was carried below Natchez without a break, but it disturbed the confidence of a good many people in the adequacy of the levee system to alone handle the lower Mississippi in any flood that might come. The increased volume of water at that time was alarming, and now again all past records of volume are beaten, and the fears aroused in 1922 are reawakened.

Of course the attempt to control the river will not be abandoned, and the levee system always will be a fundamental feature of control, but the question is earnestly pressed whether a single channel can be depended upon to carry any possible flood from the mouth of Red river to the Gulf, or should additional outlets or spillways be provided? Under a resolution of Congress a special inquiry upon this subject has been under way and a report will be ready when Congress meets.

### The Reservoir Proposal

Another proposal frequently mentioned is for reservoirs upon the principal tributaries to hold back their waters for the several purposes of affording power, serving navigation and averting floods. The engineers have shown, however, that such works upon a scale necessary to prevent floods on the lower river would be enormously costly and would require the flooding of other lands, perhaps as valuable as those which it is now desired to protect. The Ohio river gives more water to the lower Mississippi than the upper Mississippi or the Missouri and the Government is constructing a series of movable dams in the Ohio in aid of navigation. When the river rises high enough to permit free navigation these dams are lowered. It is obvious that reservoirs large enough to hold back the Ohio for any length of time would be not only very costly in construction, but also on account of flood damages that would result along that river.

The most feasible site for a reservoir to restrict the flow on the lower river would be at the junction of the Ohio and Mississippi, where there is a large area of low land available for that purpose. The army engineers, however, have calculated that a reservoir at this point to serve the purpose would need to have about the area of the State of New Jersey. Dams upon the secondary tributaries would be too far from the main river to have much influence, as the rainfall is very largely in the central valley. It was calculated that in the flood of 1913 if all the water flowing into the Ohio at Pittsburgh, all that flowing past St. Paul on the Mississippi, and all that flowing past the Missouri at Sioux City had been held back by reservoirs the flood waters below Cairo would have been reduced by only about 2 per cent.

A rainfall of 14 inches which fell on Good Friday in New Orleans and over most of the lower river region was an important factor in weakening the levees and increasing the pressure upon them.

Secretary Hoover and General Jadwin, Chief of Engineers, are on record in a recent joint statement as saying that "the most practical and economical reservoir is that which may be formed by high and strong levees in the most strategic location, the valley of the river itself, and constitute in effect a self-evacuating lake extending for 1,000 miles from Cairo to the Gulf."

### Property Damage, Crops and Effects Upon Business

In view of the extent of the overflowed area, the number of people turned out of their homes, damages to railroads and highways, interruption of farming operations, industry and trade, it is evident that the losses charge-

able to the flood are very large in the aggregate, but hasty estimates are of little value. The first appearance of an overflowed region is likely to give an exaggerated idea of the damage done, for after the waters subside and the sun shines again it is frequently found that much of the mischief which has been wrought can be made good by the labor of the occupants, and everybody works with exceptional energy to that purpose. This is especially true where the flood comes from back water, having little or no current. Where buildings are exposed to a strong current, the water is high enough to move them from their foundations, or farm lands are eroded or covered with sand, the damages are much more serious. The loss of live stock, implements, feed, seed and household effects, as occurs where warning is not received in time for their removal, leaves a community destitute and in need of substantial aid.

In regions that have not been subject to frequent overflows and have been considered well protected, farm improvements naturally have been of higher class than in the regions often submerged. The former is true of much of the land overflowed in Louisiana, and particularly in the sugar parishes and where diversified farming, truck farming and horticulture have been followed. The sugar industry of Louisiana has received a very hard blow. It represents a large investment of capital and for several years has not prospered, owing to the low price of sugar and unfavorable local conditions. Practically no sugar will be made in Louisiana this year.

The railroads are sufferers in every flood, but the reports given out thus far by companies affected indicate that they are not expecting reconstruction costs to reach very high figures. The road beds have been greatly improved in recent years, and were in better condition to stand flood waters than in the past. Traffic has suffered temporarily, but this may not affect the year's results seriously.

Expenditures for highway repairs and bridge replacements will involve important amounts. Mr. P. T. Cole, Agricultural Commissioner of the St. Louis & Southwestern Railway has given out a statement in which the required expenditures for 7 counties of Missouri and 17 counties of Arkansas are estimated at about \$1,000,000.

The hardwood lumber industry has been affected more than any other industry excepting farming. The lower Mississippi valley is the principal source of hardwood lumber in the United States. The Hardwood Manufacturers' Institute, with headquarters at Memphis, reports that production is only 50 per cent of normal. It is estimated that at least 200 hardwood mills are shut down by reason of the

floods. Moreover the recent weekly reports show a large increase in sales, indicating that the trade is alarmed by the situation. According to the "Southern Lumberman," the loss to the hardwood industry is undoubtedly heavy. In addition to damage to mills and stocks in yards, the expenses of keeping intact non-productive organizations and protecting property from flood encroachment has been serious. The flood not only shuts down mills but washes away lumber and causes deterioration of lumber stock. Lumber which has been submerged in flood waters receives a deposit of dirt and sediment which seriously lowers its grade or necessitates the scrubbing of each board before it is shipped to market. The demand for hardwood lumber was strong before this shut-down occurred and prices have been advancing rapidly in recent weeks, which is expected to balance off the losses for the industry as a whole. This illustrates how many of the losses suffered locally will be shifted to the whole country.

Until the latest levee breaks occurred in Louisiana the southern pine industry had been but slightly affected. A considerable number of Louisiana mills are doubtless closed down.

#### Crop Outlook in the Flooded Territory

Reports from the upper districts of the flooded region have been much more hopeful in the last week of May than previously. Except for the St. Francis basin in southeastern Missouri and northeastern Arkansas, which is receiving water from a crevasse in the Mississippi levee, the flood waters have practically gone from Missouri, Arkansas, Kentucky and Tennessee, and crop-planting has been going on for ten days. About 375,000 acres of crop land were flooded in Missouri, of which about 317,500 will be cropped this year. In 1926 about 134,000 acres of this area was planted to cotton, and at the average production of the State this would produce about 65,000 bales. The acreage probably will be reduced more than one-half this year.

More land was flooded in Arkansas than in any other State, the area of crop land covered being estimated at 1,750,000 acres, located in 45 counties. Of this probably 935,000 acres were planted to cotton last year, on which about 475,000 bales of cotton were produced. Probably 90 per cent of the flooded area will be put into crop this year. Different localities tell different stories about the reduction of cotton acreage, ranging from 10 per cent to 50. For the State the reduction probably will not be over 15 to 20 per cent, if as much.

A half dozen counties in West Tennessee, bordering the Mississippi, report about 180,000 acres with land flooded, or about 25 per cent, with some loss of livestock. About 15 per cent reduction is expected in crop acreage

this season. A reduction of about 25 per cent is expected in cotton, which is usually planted between May 8 and 24.

In Mississippi 735,000 acres of crop land was flooded, of which 550,000 acres were in cotton last year. The area of cotton picked in the State was 3,752,000 acres, and amount of cotton produced in flooded area approximately 275,000 bales. Possible reduction of cotton area 20 per cent. In 1912, 764,738 acres in Mississippi were flooded, and in 1922, 579,818 acres. In Washington and Sharkey Counties losses of mules and cattle are heavy, and generally throughout the Mississippi area a large part of the hog and poultry population was drowned. Except in Sharkey County the loss of work stock is not severe enough to affect materially the cultivated acreage.

The usual procedure in planting cotton land after floods, if the land had been prepared for planting or had been planted before the flood, is to go in as soon as the higher portions of the field are free of water and to drop the seed by hand in the rows previously made. As there is no weed growth against which the cotton has to contend, and the sediment deposited by the flood provides a good seed bed, cotton planted under these conditions usually grows rapidly and often produces as good a crop as that planted much earlier under normal conditions.

The following extract from a letter from the Citizens Bank and Trust Company at Yazoo City, written under the date of May 23, illustrates numerous reports which we have received:

Taking our own County of Yazoo, about one-third of which is in the Delta, it was completely inundated from two to fifteen feet deep, which is worse than it was in 1882, and until 1927 the flood of 1882 stood out as a record breaker.

The water has fallen in our own county something like eight feet and a great deal of land out from under the water is being planted, following right behind the water.

We are of the opinion that by the 15th of June all of the overflow district will have been planted, and then with favorable conditions we will, no doubt, make a good crop.

This was done in 1922 when practically all the same counties were covered with water, being, however, not quite so deep.

Flooded crop land in Louisiana is estimated at 500,000 acres. Total production of cotton in the State last year was 828,000 bales from 1,979,000 acres. Cotton land is in the northern part of the State, and it is believed that the loss of cotton acreage will be small.

In the southern part of the delta cotton may be replanted successfully up to the 15th of June, and as this work is now generally under way an estimate for a reduction of acreage of between 10 and 20 per cent would seem to be quite sufficient.

Cotton is the cash crop throughout nearly all of the flooded territory, excepting the sugar lands, which are relatively small in area. The

flood is a fertilizer, and the farmers will plant cotton if they can. In few localities has loss of work stock been large enough to be a serious factor in making the crop. The refugee camps have taken care of the labor, so that no serious scarcity is anticipated.

Aside from cotton, farming operations are generally devoted to corn and other feed crops, and there is ample time for these.

The above hasty generalizations are based upon reports received by the Department of Agriculture at Washington, supplemented by information and opinions from numerous correspondents in the flooded area, to whom we acknowledge obligations. Of course much depends upon weather conditions from now on, but apparently the reduction of acreage in cotton will be less within the flooded regions than the reduction which the farm organizations have sought to accomplish by agreement throughout all the cotton growing States. At this writing there is a question whether the reduction will be greater by flood in the delta or by drought in Oklahoma and Texas, and if the aggregate crop shall be reduced by 1,000,000 bales it probably will bring as much money to producers as the crop of last year.

#### Financial Aid

Steps are being taken throughout the flooded territory to provide credit facilities for farmers able and wanting to use them. Under the direction of Secretary Mellon and Mr. Eugene Meyer, of the War Finance Corporation, finance companies are being organized similar to those organized in different parts of the South last Fall to carry cotton. These will function in connection with the intermediate credit banks at St. Louis and New Orleans. The local banks in the river states are generally in a strong position, and will be able to command outside support if they desire it. It is quite certain that there will be no lack of banking accommodations through the regular channels.

For those who are unable to borrow in the usual manner, the American Red Cross is making credit grants to flooded counties through the chairmen of County Red Cross Chapters, who either purchase seed in large quantities or arrange with local dealers to supply seed and feed on orders from the Red Cross chairmen to needy farmers as they return to their homes, and as soon as planting is possible on even a portion of their lands they will be in position to go ahead. In addition to providing field seed, several thousand packages of assorted seeds of varieties suitable for planting at this time have been purchased and distribution is also being made of sweet potato slips. The growing of gardens will enable many families to provide a part of their own food supply quickly and will thus reduce the

requirements on the American Red Cross for supplying food.

#### Influence Upon General Trade

The general tenor of advices from bankers and merchants throughout the flooded territory is that of confidence that a few months will make a great change in appearances. Widespread losses have been suffered, but one way or another means will be provided for getting the people back into their homes and enabling them to live and put in a crop. The need to make purchases is greater than if there had been no flood. Reconstruction and repair work upon highways, railroads and for property-owners who are able to have it done will put money in circulation among people who need it. As the season advances, if prospects improve, pessimism probably will subside at an even faster rate.

The city of Memphis is near the center of an area of approximately 3,000,000 acres which has been under water, but the soil is wonderfully productive when it has a chance, and it has been replenished with fresh fertility. The experience of Memphis business men with similar conditions inspires them with the belief that a good crop will be grown and that the year 1927 will yet make a good record.

The State of Louisiana has suffered more than it ever suffered from flood before, and some features of its misfortune are more serious than the conditions in the states above, nevertheless, the interests referred to are not large in comparison with the aggregate interests of Louisiana. New Orleans has come through the greatest flood of all, making good her claim to a position of safety, and the energy and public spirit of her business men are a great asset to the State.

Six months ago the South was alarmed by the great decline in the price of cotton, which at the time seemed to involve a much greater loss of purchasing power than does the flood. Looking back over the record of bank clearings and other signs which measure prosperity no such falling off of business has in fact occurred. The agriculture of other sections was suffering from low prices at the same time, and many people looked forward to the year 1927 with apprehensions. Nevertheless, the momentum of prosperity has been great enough to overcome that recognized handicap. The Mississippi flood has inflicted serious losses upon the localities affected, but those localities fortunately are a section of a country in which prosperity generally prevails, and there is good reason to believe that general conditions will dominate and at least in some degree overcome the unfortunate conditions existing there, rather than that the latter will affect the general welfare.

# FIRST NATIONAL BANK

## IN MINNEAPOLIS

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The First National Bank, Minneapolis Trust Company and  
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